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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/632,100	08/01/2003	Maximilian Bossecker	076326-0259	1918

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3000 K STREET NW
WASHINGTON, DC 20007

EXAMINER

BROWN, DREW J

ART UNIT	PAPER NUMBER
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3616

DATE MAILED: 08/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/632,100	Applicant(s) BOSSECKER ET AL.	
	Examiner Drew J. Brown	Art Unit 3616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>8/01/03 and 3/16/04</u> | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 3-8, and 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zimmerman (U.S. Pat. No. 6,126,196) in view of Shinichi (Foreign Pat. No. 09142239).

Zimmerman discloses a gas bag envelope 10 with at least one initially closed closable outflow orifice 40 in the gas bag envelope. The outflow orifice, which comprises a hose-shaped or blow pipe-shaped design 50, is formed on an outer wall of the gas bag such that gas emerges from the gas bag when the orifice is opened (column 4, lines 1-2). Zimmerman also discloses that a part of the gas bag envelope in the region of the outflow orifice is slipped out of the gas bag, such that the outflow orifice is opened. Zimmerman, however, does not disclose at least one control band that is arranged to open or close the outflow orifice, or that the control band has two ends wherein one end is fastened to the outflow orifice and the other to the gas bag envelope.

Shinichi does disclose at least one control band 3, which during inflation of the gas bag when a predetermined state of deployment of the gas bag is reached, is arranged to open or close the outflow orifice. The control band has two ends, wherein the one end is fastened to a region of the outflow orifice 4, and the other end is connected to the gas bag envelope. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Zimmerman to have a control band as taught by Shinichi attached to the orifice 40 and

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the gas bag 10 that slips the region 50 into or out of the gas bag when a predetermined state of deployment is reached so that the outflow orifice opens or closes. A control band would be useful because it can assist in the slipping of the gas bag in case of interference due to inflation problems.

Shinichi also discloses that the other end of the control band is fastened to the gas bag envelope in a region facing a vehicle occupant and that it is fastened in a lateral region of the gas bag envelope. There is also a deflection device 11, formed by a loop that is arranged on an inside of the gas bag envelope, where the control band is led through it. The deflection device is fastened to the gas bag envelope in a region facing a vehicle occupant, and the other end of the control band is fastened in a lateral region of the gas bag envelope. The one end of the control band is attached in the region of the outflow orifice at a point opposite the one end of the control band. Finally, the control band is fastened at at least one point in a region between its one end and another end 15 to the gas bag envelope by means of a fastening element 11, where the fastening element is designed to release fastening when a predetermined internal pressure of the gas bag is reached.

3. Claims 2 and 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zimmerman in view of Shinichi as applied to claims 1, 3-8, and 10-12 above, and further in view of Sinnhuber et al. (U.S. Pat. No. 5,556,128). Zimmerman, as modified by Shinichi, discloses the claimed gas bag as discussed above but does not disclose two part gas bags that are flow-connected to one another, wherein the at least one outflow and/or overflow orifice is arranged between the part gas bags. Sinnhuber et al. does disclose two part gas bags 13 and 14 that are flow connected to one another with an outflow and/or overflow orifice 16 arranged between the

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part gas bag. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify Zimmerman to have two part gas bags that are flow connected to each other by an outflow and/or overflow orifice in order to regulate the pressures of each part to provide optimal protection for both the upper and lower-body regions of the occupant.

Sinnhuber et al. also discloses that the gas bag comprises a two-chamber side airbag with a pelvic part gas bag 14 connected to a thoracic part gas bag 13 by an outflow and/or overflow orifice. The pelvic part is inflated more quickly than the thoracic part, and wherein after the conclusion of a first phase of inflation of the gas bag, the outflow and/or overflow orifice is opened such that gas of the pelvic part gas bag can flow into the thoracic part gas bag (column 3, lines 53-60).

4. Claims 9 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zimmerman in view of Shinichi as applied to claims 1, 3-8, and 10-12 above, and further in view of Pinsenschaum et al. (U.S. Pat. No. 6,592,146 B2). Zimmerman, as modified by Shinichi, discloses the claimed gas bag as discussed above but does not disclose that the control band is connected at its other end to one end of at least two auxiliary control bands, where the other end of the at least one control band is connected to the gas bag envelope. Zimmerman, as modified by Shinichi, also does not disclose that the fastening element comprises a touch-and-close fastening which connects the gas bag envelope and the control band to each other.

Pinsenschaum et al. does disclose a control band 131 that is attached to one end of at least two auxiliary control bands 130, where the other end of the at least one control band is connected to the gas bag envelope through a touch-and-close fastening 132 (column 8, lines 23-28).

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Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify Zimmerman to have auxiliary bands in order to ensure that the control band opens or closes the outflow and/or overflow orifice in the case of an out-of-position occupant. It would have also be obvious to further modify Zimmerman to connect the one end of the control band to the gas bag envelope with a touch-and-close fastening because the fastener can be manufacture to be released when any desired force acts on it.

5. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Zimmerman in view of Shinichi as applied to claims 1, 3-8, and 10-12 above, and further in view of Ishikawa (U.S. Pat. No. 6,676,158 B2). Zimmerman, as modified by Shinichi, discloses the claimed gas bag as discussed above but does not disclose that the fastening element comprises a tear-open seam which connects the gas bag envelope and the control band to one another. Ishikawa, however, does disclose a tear-open seam 33, which connects the gas bag envelope and the control band 41 to one another. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify Zimmerman to connect the one end of the control band to the gas bag envelope with a tear-open seam because seam can be an integral part of the gas bag envelope, so the cost of manufacturing is reduced because a separate fastening component is not needed.

6. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Zimmerman in view of Shinichi as applied to claims 1, 3-8, and 10-12 above, and further in view of Hill (U.S. Pat. No. 6,086,092) and Heym et al. (Foreign Pat. No. 196 40 322 A1). Zimmerman, as modified by Shinichi, discloses the claimed gas bag as discussed above but does not disclose that the gas bag further comprises two part gas bags and that the outflow and/or overflow orifice is

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arranged to be activated so that the part gas bags are inflated uniformly, and after the conclusion of the first phase of inflation, the outflow and/or overflow orifice is closed so a different gas pressure can be formed in the two part gas bags. Hill discloses the two part (30 and 40) gas bag with outflow and/or overflow orifices 90 arranged between the two parts for uniform inflation, and Heym et al. discloses that an orifice 4 can be used between the two parts that can close (Fig. 4a and 4b) so a different pressure can be formed in the two part gas bags. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify Zimmerman as taught by Hill and Heym et al. to have two part gas bags so the thoracic and pelvic regions of the occupant can be properly protected having different pressures in each gas bag part. It would also be obvious to have an orifice between the two parts that can close after a first phase of uniform inflation so different pressures can be formed in the two parts so that only one generator is needed to inflate both parts. If an orifice was not provided, at least one more generator would be needed to further inflate the gas bag parts to reach their intended final pressures, which would increase the cost of manufacturing and installation of the gas bag unit.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Drew J. Brown whose telephone number is 571-272-1362. The examiner can normally be reached on Monday-Thursday from 7 a.m. to 4 p.m..


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul N. Dickson can be reached on 571-272-6669. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Drew J Brown
Examiner
Art Unit 3616

DJB


PAUL N. DICKSON
SUPERVISORY PATENT EXAMINER
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